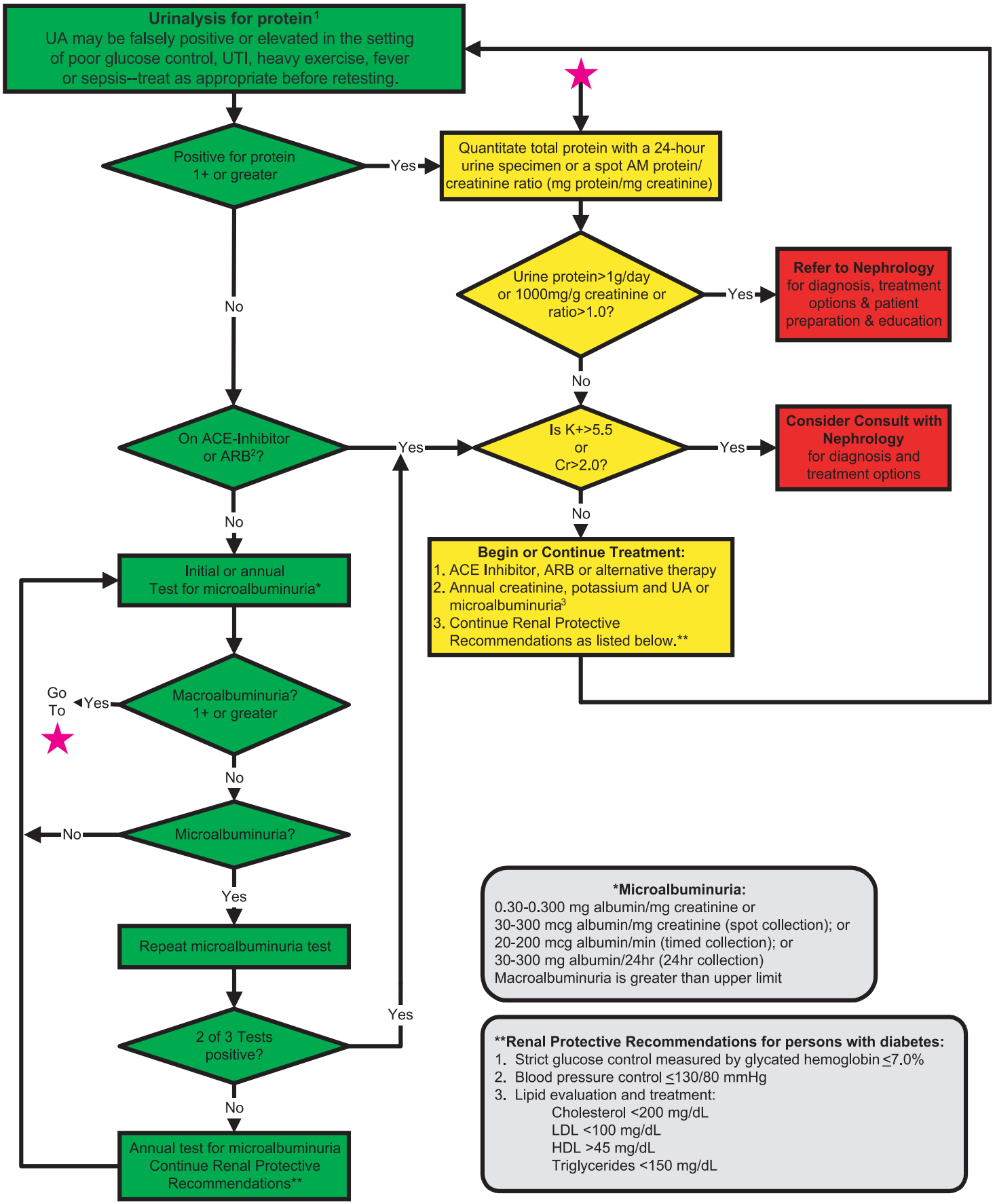
Recommendations for Diabetes Renal Disease Prevention, Detection, Treatment and Monitoring



[1]Check with your lab on test choice and availability, specimen collection, preference and interpretation of results.
[2] ACE inhibitor = Angiotensin Converting Enzyme inhibitor, ARB = Angiotensin Receptor Blocker.
[3]Evidence for annual microalbuminuria if patient on ACE or ARB inconclusive.

Department of Health, Diabetes Kidney Screening and Treatment Task Force (Rev. 7/05/02)

Renal Disease in Diabetes

Screening	Treatment and Monitoring	Risk of ESRD
Check for gross proteinuria with UA*		
UA less than 1+ protein: Test for microalbuminuria** with any of the following: 1. Spot AM urine for mg albumin/mg creatinine ratio* or 2. Timed urine collection for mcg albumin/min or 3. 24 hour urine collection for total mg albumin/24 hours ***UA 1+ protein or greater:*** See Macroalbuminuria below:	**Protective Recommendations for all patients** 1. Strict glucose control (HbA1C less than or equal to 7.0) 2. Strict blood pressure control (less than or equal to 130/80) 3. Strict lipid control (cholesterol < 200, LDL < 100, HDL > 45 for men and > 55 for women, triglycerides < 150).	
No Microalbuminuria: ***1. Spot urine: Alb/Cr < 0.030 on 2/3 tests (rule out false positives*)*** ***2. Timed urine collection: Urine albumin < 20 mcg/min*** ***3. 24 hour urine collection: Total urine albumin < 30 mg***	1. Repeat test for microalbuminuria** **annually** 2. Continue **Protective Recommendations** as above 3. If patient already on ACE inhibitor or ARB c heck serum creatinine, K^+ and UA for gross proteinuria annually 4. If serum Cr > 2 or K^+ > 5.5 **consider consult with nephrologist**	**Low**
Microalbuminuria (incipient nephropathy): ***1. Spot urine: Alb/Cr 0.030-0.300 on 2/3 tests (rule out false positives*)*** ***2. Timed urine collection: Urine albumin 20-200 mcg/min*** ***3. 24 hour urine collection: Total urine albumin 30-300 mg***	1. Continue **Protective Recommendations** as above 2. Check serum creatinine and K^+ and UA for gross proteinuria annually 3. If serum Cr < 2 and K^+ < 5.5 treat with ACE inhibitor or ARB. 4. If serum Cr > 2 or K^+ > 5.5 **consider consult with nephrologist**	**Mod: incipient nephro-pathy**
Macroalbuminuria/gross proteinuria (overt nephropathy): ***1. UA equal to or greater than 1+ protein*** ***2. Spot urine: Alb/Cr > 0.300 on 2/3 tests (rule out false positives*)*** Check degree of proteinuria with: 1. 24 hour urine collection for total gm urine **protein or** 2. Spot AM urine **protein**/creatinine ratio ***1. 24 hour urine collection: 500 mg - 1 gram*** ***2. Spot urine protein/creatinine: 0.5 - 1.0***	1. Continue treatment as for microalbuminuria above 2. **Consider consult with nephrologist**	**High: overt nephro-pathy**
Marked proteinuria (severe renal disease): ***1. 24 hour urine collection: > 1 gram or*** ***2. Spot urine protein/creatinine: > 1.0***	**Refer to nephrologist for education and preparation for dialysis**	**Extremely high: pending ESRD**

*UA or spot AM urine albumin/creatinine ratio may be falsely positive or elevated in the setting of poor glucose control, UTI, heavy exercise, fever or sepsis - treat as appropriate before re-testing

**Check with your lab on test choice and availability, specimen collection, preference and interpretation of results

Washington State Department of Health Kidney Screening Task Force
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